

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079639 A3

(51) International Patent Classification:

A47J 31/06 (2006.01) A47J 31/40 (2006.01)

(21) International Application Number:

PCT/GB2005/000476

(22) International Filing Date:

11 February 2005 (11.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0403493.0 17 February 2004 (17.02.2004) GB

(71) Applicant (for all designated States except US): **KRAFT FOODS R & D, INC.** [US/DE]; Bayerwaldstrasse 8, 81737 Munich (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HALLIDAY, Andrew, Michael** [GB/GB]; Kraft Foods UK Ltd., Ruscote Avenue, Banbury, Oxfordshire OX16 2QU (GB). **HANSEN, Nicholas, Andrew** [GB/GB]; Kraft Foods UK

Ltd., Ruscote Avenue, Banbury, Oxfordshire OX16 2QU (GB). **BALLARD, Colin, Darrel** [GB/GB]; Kraft Foods UK Ltd., Ruscote Avenue, Banbury, Oxfordshire OX16 2QU (GB). **PANESAR, Satwinder, Singh** [GB/GB]; Kraft Foods UK Ltd., Ruscote Avenue, Banbury, Oxfordshire OX16 2QU (GB).

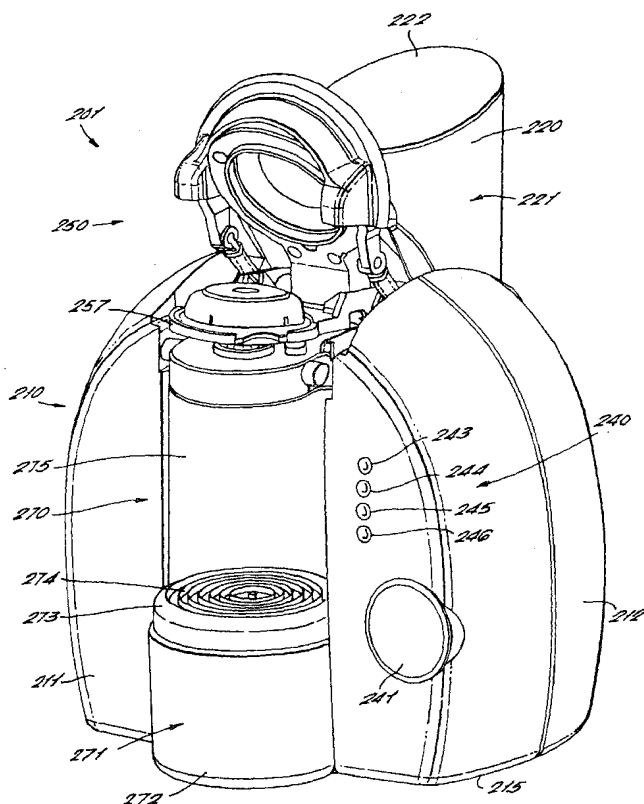
(74) Agents: **ALEXANDER, Thomas, Bruce** et al.; Boulton Wade Tennant, Verlam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: AN INSERT, A MACHINE AND A SYSTEM FOR THE PREPARATION OF BEVERAGES



(57) Abstract: An insert (400) for use in a beverage preparation machine (201) of a type comprising a brew head (250) suitable for receiving a rigid or semi-rigid cartridge (1). The brew head (250) comprises an upwardly directed inlet (253) for supplying water to the brew head (250) and a downwardly directed outlet (254) for outflow of beverage produced by the machine (201), the insert comprises an upper part (401), a lower part (402) and sealing means (403), the upper (401) and lower (402) parts being moveable between an open configuration in which a quantity of beverage ingredients may be loaded into the insert (400) and a closed configuration in which the upper (401) and lower (402) parts are sealed together by the sealing means (403) to define therebetween a brewing volume containing, in use, the quantity of beverage ingredients, the lower part passes upwardly through the inlet (405) of the insert (400) into the brewing volume and such that beverage produced from the water and the quantity of beverage ingredients passes downwardly through the outlet (404) of the insert to flow out of the outlet (254) of the brew head (250).



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM,

Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
23 March 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.